

IN THE CLAIMS:

1. (Original) A composition for a thick oxide superconducting film, containing a copper salt of a branched saturated aliphatic carboxylic acid having 6 or more carbon atoms and/or a copper salt of an alicyclic carboxylic acid having 6 or more carbon atoms.
2. (Original) The composition for a thick oxide superconducting film according to claim 1, containing yttrium trifluoroacetate and barium trifluoroacetate.
3. (Original) The composition for a thick oxide superconducting film according to claim 1, containing an yttrium salt of a branched saturated aliphatic carboxylic acid having 6 or more carbon atoms and/or an yttrium salt of an alicyclic carboxylic acid having 6 or more carbon atoms, and barium trifluoroacetate.
4. (Currently Amended) The composition for a thick oxide superconducting film according to claim 1 ~~anyone of claims 1 to 3~~, wherein the copper salt of a branched saturated aliphatic carboxylic acid having 6 or more carbon atoms and/or the copper salt of an alicyclic carboxylic acid having 6 or more carbon atoms is at least one kind selected from the group consisting of copper neodecanoate, copper isononanoate, copper 2-ethylhexanoate, and copper naphthenate.
5. (Currently Amended) The composition for a thick oxide superconducting film according to claim 1 ~~anyone of claims 1 to 4~~, containing an organic solvent having a

boiling point of 80°C or higher as a solvent.

6. (Currently Amended) The composition for a thick oxide superconducting film according to claim ~~claims~~ 5, which is characterized in that the foregoing organic solvent is 2-octanone.

7. (Currently Amended) An oxide superconductor in the form of a thick film tape, subjecting an oxide superconducting precursor, which is obtained by coating the composition for a thick oxide superconducting film according to claim 1 ~~any one of claims 1 to 6~~ on a substrate and then subjecting it to a heat treatment for calcination, to a heat treatment for crystallization, thereby forming a thick oxide superconductor film on the foregoing substrate.

8. (Original) The oxide superconductor in the form of a thick film tape according to claim 7, wherein in the foregoing heat treatment for calcination, a heating rate is 2°C/min or more.

9. (Original) The oxide superconductor in the form of a thick film tape according to claim 7, wherein in the foregoing heat treatment for calcination, the product of the traveling speed of the substrate and the temperature gradient is preferably 2°C/min or more.

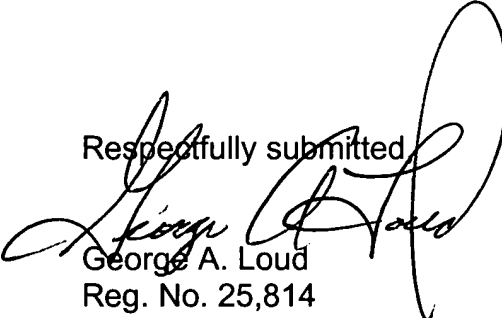
10. (Currently Amended) The oxide superconductor in the form of a thick film tape according to claim 7 ~~anyone of claims 7 to 9~~, wherein the foregoing heat treatment for calcination is carried out at 250°C or higher in the atmosphere having a water vapor partial pressure of not more than 2.1% by volume.

11. (Currently Amended) The oxide superconductor in the form of a thick film tape according to claim 7 ~~anyone of claims 7 to 10~~, wherein a difference between the maximum thickness portion and the minimum thickness portion in the foregoing thick oxide superconducting film is 1 μm or less.

12. (Currently Amended) The oxide superconductor in the form of a thick film tape according to claim 7 ~~anyone of claims 7 to 11~~, wherein the amount of change in critical current density is $\pm 0.5 \text{ MA/cm}^2$.

13. The oxide superconductor in the form of a thick film tape according to claim 7 ~~anyone of claims 7 to 12~~, wherein the foregoing thick oxide superconducting film is comprised of $\text{RE}_{1+x}\text{Ba}_{2-x}\text{Cu}_3\text{O}_y$ (wherein RE represents at least one element selected from the group consisting of Y, Nd, Sm, Gd, Eu, Yb, Pr and Ho; x represents the number of $0 \leq x \leq 0.4$; and y represents the number of $6.5 \leq y \leq 7.0$).

Respectfully submitted,



George A. Loud
Reg. No. 25,814

Dated: April 11, 2005

LORUSSO, LOUD & KELLY
3137 Mount Vernon Avenue
Alexandria, VA 22305

(703) 739-9393